Amendments to the Claims:

Claim List:

1. (previously presented) A method of determining a title from a document image, comprising:

dividing the document image into minimal circumscribing rectangles which contain a character image;

recognizing characters in said minimal circumscribing rectangles; and

determining a title of the document image based upon a likelihood of each of said minimal circumscribing rectangles containing a title, said likelihood being determined by a single value based upon multiple criteria obtained during said character recognition and said title determination, said multiple criteria comprising natural language likelihood and any combination of character row area coordinates, character type, number of characters, character code assurance, character minimum circumscribing rectangle coordinates, and character minimum circumscribing rectangle size.

2. (previously presented) The method of determining a title from a document image according to claim 1 wherein said single value includes a sum of points based on said multiple criteria .

3. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include characteristics on font.

4. (previously presented) The method of determining a title from a document image according to claim 2 wherein said font characteristics include a frequency of a particular font type.

5. (original) The method of determining a title from a document image according to claim 2 wherein said character recognition further includes an act of matching said characters with a set of predetermined words, said predetermined words indicating said title.

6. (previously presented) The method of determining a title from a document image according to claim 5 wherein said multiple criteria include a result of said matching with said predetermined words.

7. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include a number of said characters.

8. (original) The method of determining a title from a document image according to claim 7 wherein said number of said characters is compared to a predetermined maximal threshold number.

9. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include an assurance level of said character recognition.

10. (original) The method of determining a title from a document image according to claim 9 wherein said assurance level is compared to a predetermined minimal threshold value.

11. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include layout characteristics.

12. (previously presented) The method of determining a title from a document image according to claim 11 wherein said layout characteristics include centering, underlining, size, or any combination thereof.

13. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include an indication of whether or not said characters end in a noun form.

14. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include an indication of whether or not said characters end in a set of predetermined suffixes.

15. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include a ratio between a length and a height of each of said circumscribing rectangles.

16. (previously presented) The method of determining a title from a document image according to claim 2 wherein said multiple criteria include a ratio between a summed width of said characters and a corresponding one of said circumscribing rectangles.

17. (original) The method of determining a title from a document image according to claim 1 wherein said likelihood is adjusted according to a type of said image documents.

18. (original) The method of determining a title from a document image according to claim 1 wherein said title is combined with a keyword.

19. (previously presented) A system for determining a title from a document image, comprising:

a character row area determination unit for dividing the document image into minimal circumscribing rectangles which contain a character image;

a character recognition unit connected to said character row area determination unit for recognizing characters in said minimal circumscribing rectangles; and

a title evaluation point determination unit connected to said character recognition unit for determining a title of the document image based upon a likelihood of each of said minimal circumscribing rectangles containing a title, said likelihood being determined by a single value based upon multiple criteria obtained during said character recognition and said title evaluation, said multiple criteria comprising natural language likelihood and any combination of character row area coordinates, character type, number of characters, character code assurance, character

minimum circumscribing rectangle coordinates, and character minimum circumscribing rectangle size.

20. (previously presented) The system for determining a title from a document image according to claim 19 wherein said title evaluation point determination unit determines said single value in terms of a sum of points based on said multiple criteria.

21. (previously presented) The system for determining a title from a document image according to claim 20 wherein said title evaluation point determination unit further comprises a font determination unit for generating at least one criterion of said multiple criteria on font characteristics.

22. (original) The system for determining a title from a document image according to claim 21 wherein said font determination unit determines said font characteristics based on a frequency of a particular font type.

23. (original) The system for determining a title from a document image according to claim 20 wherein said title evaluation point determination unit further comprises a natural language analysis unit for matching said characters with a set of predetermined words, said predetermined words indicating said title.

24. (original) The system for determining a title from a document image according to claim 23 wherein said natural language analysis unit generates a result of matching of said characters with said predetermined words.

25. (previously presented) The system for determining a title from a document image according to claim 20 wherein said character recognition unit generates at least one criterion of said multiple criteria based on a number of said characters.

26. (original) The system for determining a title from a document image according to claim 25 wherein said title evaluation point determination unit compares said number of said characters to a predetermined maximal threshold number.

27. (previously presented) The system for determining a title from a document image according to claim 20 wherein said character recognition unit generates at least one criterion of said multiple criteria based on an assurance level of said character recognition.

28. (original) The system for determining a title from a document image according to claim 27 wherein said title evaluation point determination unit compares said assurance level to a predetermined minimal threshold value.

29. (original) The system for determining a title from a document image according to claim 20 wherein said title evaluation point determination unit further comprises a characteristics extraction unit for extracting layout characteristics.

30. (previously presented) The system for determining a title from a document image according to claim 29 wherein said extraction unit extracts said layout characteristics on centering, underlining, size, or any combination thereof.

31. (previously presented) The system for determining a title from a document image according to claim 23 wherein said natural language analysis unit generates an analysis result on at least one criterion of said multiple criteria indicating whether or not said characters end in a noun form.

32. (previously presented) The system for determining a title from a document image according to claim 23 wherein said natural language analysis unit generates an analysis result on at least one criterion of said multiple criteria indicating whether or not said characters end in a set of predetermined suffixes.

33. (previously presented) The system for determining a title from a document image according to claim 20 wherein said character row area determination unit generates at least one criterion of said multiple criteria based on a ratio between a length and a height of each of said circumscribing rectangles.

34. (previously presented) The system for determining a title from a document image according to claim 20 wherein said character row area determination unit generates at least one criterion of said multiple criteria based on a ratio between a summed width of said characters and a corresponding one of said circumscribing rectangles.

35. (original) The system for determining a title from a document image according to claim 19 wherein said likelihood is adjusted according to a type of said image documents.

36.(original) The system for determining a title from a document image according to claim 19 wherein said title is combined with a keyword.